AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A shutter for protection of building portals against forces exerted by hurricanes, comprising:

a unitary frame including:

four longitudinal rail members, each longitudinal rail member having a pair of opposite distal ends, said four longitudinal rail members are arranged such that one of said four longitudinal rail members is disposed along each side ~~a respective four sides~~ of a rectangular perimeter, such that one distal end of one of said longitudinal rail members substantially abuts one distal end of another of said longitudinal rail members at a respective vertex ~~vertices~~ of said rectangular perimeter, each longitudinal rail member having a receptacle opening at each of its distal ends and a receptacle extending more than a first distance toward its opposite distal end; and

four corner connection members, each located at a respective one of the four vertices of said rectangular perimeter, and each corner connection member having a first projection and a second projection, said first projection extending said first distance into and bonded to a surface of the receptacle of one said longitudinal rail members and said second projection extending said first distance into and bonded to a surface of the receptacle of another of said longitudinal rail members;

wherein at least one of said four corner connection members has a latch-pin passage extending through its first projection in its extending direction, said at least one longitudinal rail that is a hollow box includes an elongated clearance passage from an exterior of said rail to a channel, extending in the direction of said channel, and another of said longitudinal rails includes a latch pin clearance hole, and further comprising a latch pin extending through and supported by said latch-pin passage;

wherein the corner connectors flex for reducing bending and twisting forces applied to said unitary frame; and

a portal covering structure secured to and supported by said unitary frame.

2. (Currently Amended) A shutter according to claim 1 wherein at least one of said four longitudinal rail members is a hollow structure having an inner channel ~~opening at each of, and~~ extending between, its two distal ends, a first length of said inner channel forming the receptacle at one of the distal ends of the longitudinal rail and a second length of said inner channel forming the receptacle at the other distal end of the longitudinal rail.

3. (Currently Amended) A shutter according to claim 1, wherein a first of said longitudinal rails includes a retaining structure for retaining a first secondary rail adjacent and parallel to said first longitudinal rail, and a second of said longitudinal rails includes a retaining structure for retaining a second secondary rail adjacent and parallel to said second longitudinal rail ~~said~~, said first longitudinal rail and said second longitudinal rail forming facing sides of said rectangular unitary frame.

4. (Original) A shutter according to claim 3, further comprising a first secondary rail constrained adjacent and parallel to said first longitudinal rail by said first longitudinal rail retaining structure, and a second secondary rail constrained adjacent and parallel to said second longitudinal rail by said second longitudinal rail retaining structure, and

wherein each of said first secondary rail and said second secondary rail includes at least one louver-support through hole, and

wherein said portal covering structure comprises at least one louver supported at one end by said louver-support through hole formed in said first secondary rail and supported at its other end by said louver-support through hole formed in said second secondary rail.

5. (Currently Amended) A shutter according to claim 4, wherein a third of said longitudinal rails includes a retaining structure for retaining a pair of third secondary rails adjacent and parallel to said third longitudinal rail, and colinear with respect to one another, and a fourth of said longitudinal rails includes a retaining structure for retaining a pair of fourth secondary rails adjacent and parallel to said fourth longitudinal rail, and colinear with respect to one another, said third longitudinal rail and said fourth longitudinal rail forming facing sides of said rectangular unitary frame perpendicular to said first and second longitudinal rails.

6. (Original) A shutter according to claim 4, further comprising a center louver support rail having at least one louver-support through hole, secured to said unitary frame to extend substantially perpendicular to said louver, and

wherein said louver passes through said through hole to be supported at a location of said louver between said louver's first and second distal ends.

7. (Currently Amended) A shutter according to claim 5, further comprising a center louver support rail having at least one louver-support through hole, secured to said unitary frame to extend substantially perpendicular to said louver, and

wherein said louver passes through and is supported by said louver-support through hole to be supported at a location of said louver between said louver's first and second distal ends, and

wherein a first distal end of said center louver support abuts said third longitudinal rail ~~said~~ and a second distal end of said center louver support, opposite said first distal end, abuts said fourth longitudinal rail, and said center louver support is supported from movement in a direction parallel to said louver by said pair of third secondary rails and said pair of fourth secondary rails.

8. (Currently Amended) A shutter according to claim 7, further comprising a first abutment member engaged with and extending from the first distal end of said center louver support member, and a second abutment member engaged with and extending from the first distal end of said center louver support member,

wherein said center louver support is supported, at its first distal end, from movement in a direction parallel to said louver by a first of said pair of third secondary rails abutting said fourth longitudinal rail ~~a first of said corner connection members~~ at one end and said first abutment member at its other end, and by a second of said pair of third secondary rails abutting said second longitudinal rail ~~a second of said corner connection members~~ at one end and said first abutment member at its other end, and

wherein said center louver support is supported, at its second distal end, from movement in a direction parallel to said louver by a first of said pair of fourth secondary rails abutting said fourth longitudinal rail ~~a third of said corner connection members~~ at one end and said second abutment

member at its other end, and by a second of said pair of fourth secondary rails abutting said second longitudinal rail ~~a fourth of said L-shaped corner connection members~~ at one end and said second abutment member at its other end.

9. (Canceled without prejudice)

10. (Currently Amended) A shutter according to claim 1 ~~claim 9~~ further comprising:

a latch pin receiving structure, having a latch pin receptacle, mounted to an exterior wall surface; and

a manually rotatable screw having a threaded shaft extending through said elongated clearance passage and threadably engaged with said latch pin, with a manual contact structure exterior to said another of said longitudinal rails,

wherein tightening said manually rotatable ~~manual~~ screw substantially prevents motion of said latch pin in the extending direction of said latch pin passage, and wherein loosening said manually rotatable ~~manual~~ screw allows movement of said latch pin from an extended position in which it extends though said latch pin passage, through said latch pin clearance hole and into said latch pin receptacle, to a retracted position wherein the latch pin does not extend into said latch pin receptacle.

11. (Currently Amended) A shutter according to claim 1 wherein each of the distal ends of said longitudinal rail members has a substantially 45 degree mitered surface, and wherein at least one of said four corner connection members and said receptacles of ~~said~~ at least two longitudinal rail members are constructed and arranged such that when said mitered surface at one distal end of one of said at least two longitudinal rails abuts said mitered surface at one distal end of another of said at least two longitudinal rails, the first projection of said corner connection member extends said first distance into the receptacle at said one distal end of said one of said at least two longitudinal rails, and the second projection of said corner connection member extends said first distance into the receptacle at said one distal end of said another of said longitudinal rail members.

12. (Original) A shutter according to claim 4, wherein the retaining structure of said first longitudinal rail is a U-shaped channel, extending the length of said first rail, formed of an exterior wall of said rail and a pair of lateral walls extending parallel to one another, in a direction away from the exterior wall, with a first ridge extending along the distal edge of a first of said pair of lateral walls, and a second ridge extending along the distal edge of a second of said pair of lateral walls, the distance between opposing faces of said pair of lateral walls being greater than a width of said first secondary rail, and the distance between said first ridge and said second ridge being less than said width of the first secondary rail.

13. (Original) A shutter according to claim 12, wherein all of said first, second, third and fourth longitudinal rails have the same cross-section.

14. (Original) A shutter according to claim 12, wherein all of said first, second, third and fourth secondary rails have the same outer cross-sectional dimensions.

15. (Currently Amended) A shutter for protection of building portals against forces exerted by hurricanes comprising:

a first outer frame member extending between a first distal end and a second distal end, and having a first receptacle at said first distal end and a second receptacle at said second distal end;

a first frame corner connection member, having a first projection secured within said first receptacle of said first outer frame member, and having a second projection;

a second frame corner connection member, having a first projection secured within said second receptacle of said first outer frame member, and having a second projection;

a second outer frame member extending between a first distal end and a second distal end, having a first receptacle at said first distal end receiving and secured around said second projection of said first frame corner connection member, and having a second receptacle at said second distal end;

a third outer frame member extending between a first distal end and a second distal end, having a first receptacle at said first distal end receiving and secured around said second projection

of said second frame corner connection member, and having a second receptacle at said second distal end;

a third frame corner connection member, having a first projection secured within said second receptacle of said second outer frame member, and having a second projection;

a fourth frame corner connection member, having a first projection secured within said second receptacle of said third outer frame member, and having a second projection; ~~and~~

a fourth outer frame member extending between a first distal end and a second distal end, having a first receptacle at said first distal end receiving and secured around said second projection of said third frame corner connection member, and having a second receptacle at said second distal end receiving and secured around said second projection of said fourth frame corner connection member;

wherein at least one of said four frame corner connection members has a latch-pin passage extending through its first projection in its extending direction, a corresponding one of said four outer frame members further comprises an elongated clearance passage from an exterior of said corresponding outer frame member extending in an extending direction of the corresponding outer frame member, and another one of said four outer frame members includes a latch pin clearance hole, and further comprising a latch pin extending through and supported by said latch-pin passage;

wherein the latch pin is adapted to pass through a latch pin receiver mounted exterior to the unitary frame, wherein the latch pin receiver mount comprises a camel bracket with two side plates and a through hole in one of the two side plates for receiving an end of the latch pin; and

wherein said four frame corner connection members flex for reducing bending and twisting forces applied to said shutter.

16. (Currently Amended) A shutter according to claim 15, wherein said first outer frame member includes a plurality of first louver-support receptacles spaced apart from one another along said first axis,

said second outer frame member includes a plurality of second louver-support receptacles facing and in alignment with said plurality of first ~~second~~ lover-support receptacles, and

said portal-covering structure includes a plurality of louver members, each having a first distal end projecting into and supported by a corresponding one of said first louver support receptacles and a second distal end opposite its first distal end, projecting into and supported by a corresponding one of said second louver support receptacles.

17. (Withdrawn) A method for making a shutter comprising

providing four rails, each extending a length and each having a receptacle at each of its ends;

providing four corner connection members, each having a first projection shaped and dimensioned for insertion into at least one of said receptacles of at least one of said rails, and each having a second projection shaped and dimensioned for insertion into at least one of said receptacles of at least one of said rails;

adhering the first projection of a first of said corner connection members within one of the receptacles of a first of said rails;

adhering the first projection of a second of said L-shaped corner connection members within the other of the receptacles of said first of said rails;

adhering the second projection of said first of said corner connection members within one of the receptacles of a second of said rails, such that said second of said rails is connected perpendicular to said first of said rails;

adhering the second projection of said second of said corner connection members within one of the receptacles of a third of said rails, such that said third of said rails is connected perpendicular to said first of said rails and parallel to said second of said rails;

adhering the first projection of a third of said corner connection members within the one of the receptacles of a fourth of said rails;

adhering the first projection of a fourth of said L-shaped corner connection members within the other of the receptacles of said fourth of said rails;

adhering the second projection of said third of said corner connection members within the other of the receptacles of said second of said rails, and the second projection of said fourth of said corner connection members within the other of the receptacles of said third of said rails the such that said fourth of said rails is connected perpendicular to said second and third of said rails and parallel to said first of said rails.

18. (Original) A shutter according to claim 1 wherein at least said first frame corner connection member has its first projection extending substantially perpendicular to its second projection member.

19. (Currently Amended) A shutter according to claim 18 wherein at least said first frame corner connection member is an L-shaped structure, with said first projection and said second projection member extending substantially perpendicular from a common junction member to form ~~for~~ an L shape.

20. (Original) A shutter according to claim 15 wherein at least said first frame corner connection member has its first projection extending substantially perpendicular to its second projection member.

21. (Currently Amended) A shutter according to claim 20 ~~claim 19~~ wherein at least said first frame corner connection member is an L-shaped structure, with said first projection and said second projection member extending substantially perpendicular from a common junction member to form an L shape.

22. (Currently Amended) A shutter for protection of building portals against forces exerted by hurricanes, comprising:

a rectangular frame structure having a first pair of perimeter rails parallel to and spaced apart from one another, and a second pair of perimeter rails parallel to and spaced apart from one another and perpendicular to the first pair of perimeter rails, said first pair of perimeter rails secured to said second pair of perimeter rails, wherein each of the first pair of perimeter rails includes a plurality of

louver support receptacles arranged such that the plurality included in one of ~~if~~ the first pair of rails faces and is aligned with the plurality included in the other of the first pair of rails;

a center louver support rail extending parallel to the first pair of perimeter rails, having one of its distal ends secured to a first of said second pair of perimeter rails, and the other of its distal ends secured to the other of said second pair of perimeter rails, wherein said center louver support rail includes a plurality of louver support through holes; ~~and~~

a plurality of louvers, each of said plurality of louvers having a first of its distal ends extending into and supported by a corresponding one of said plurality of louver support receptacles formed in said one of said second pair of perimeter rails, the other of its distal ends extending into and supported by a corresponding one of said plurality of louver support receptacles formed in the other of said second pair of perimeter rails, and extending through a corresponding one of said plurality of louver support through holes formed in said center louver support rail; and

wherein each of said plurality of louvers is supported by the center louver support rail but is not coupled to the center louver support rail for increasing the strength of said plurality of louvers with respect to airborne objects.

23. (Currently Amended) A shutter for protection of building portals against forces exerted by hurricanes, comprising:

a rectangular frame structure having a first pair of perimeter rails parallel to and spaced apart from one another, and a second pair of perimeter rails parallel to and spaced apart from one another and perpendicular to the first pair of perimeter rails, said first pair of perimeter rails secured to said second pair of perimeter rails with L-shaped corner connection members, wherein the L-shaped corner connection members comprise a plurality of longitudinal grooves separated by a plurality of lands on at least one surface of the L-shaped corner connection member, wherein the plurality of lands corresponds to a plurality of grooves within the first pair of perimeter rails and a plurality of grooves within the second pair of perimeter rails;

wherein the corner connectors flex for reducing bending and twisting forces applied to said unitary frame;

wherein at least one of said first pair of perimeter rails includes latch pin guide extending in the direction of said perimeter rail and at least one of said second pair of perimeter rails includes a latch pin clearance hole aligned with said latch pin guide; and

a latch pin supported by and movable within said latch pin guide, in said direction between an extended position and a retracted position, wherein, in said extended position a distal portion of latch pin extends through said latch pin clearance hole to protrude outward from said frame.

24. (Previously Presented) The shutter of claim 23, wherein said at least one of said first pair of perimeter rails having said latch pin guide comprises a hollow member surrounding and supporting said latch pin guide, and wherein said latch pin guide includes a latch pin support through hole dimensioned and arranged to accommodate and support said latch pin in moving between said extended and retracted position.

25. (Previously Presented) The shutter of claim 24, wherein an elongated slot extends in a depth direction from an outer surface of said hollow member of said at least one of said first pair of perimeter rails having said latch pin guide into said latch pin support through hole, and has a slot length extending in the direction that said latch pin moves from said extended position to said retracted position comprises a hollow member, and has a slot width, further comprising:

a manual actuator member connected to said latch pin and extending outward, in a direction radial with respect to the direction that said latch pin moves from said extended position to said retracted position, through said slot, and having a manual contact surface above said slot.

26. (New) A shutter for protection of building portals against forces exerted by hurricanes, comprising:

a rectangular frame structure having a first pair of perimeter rails parallel to and spaced apart from one another, and a second pair of perimeter rails parallel to and spaced apart from one another and perpendicular to the first pair of perimeter rails, said first pair of perimeter rails secured to said second pair of perimeter rails, wherein each of the first pair of perimeter rails includes a plurality of louver support receptacles arranged such that the plurality included in one of the first pair of rails faces and is aligned with the plurality included in the other of the first pair of rails;

a center louver support rail extending parallel to the first pair of perimeter rails, having one of its distal ends secured to a first of said second pair of perimeter rails, and the other of its distal ends secured to the other of said second pair of perimeter rails, wherein said center louver support rail includes a plurality of louver support through holes;

a plurality of louvers, each of said plurality having a first of its distal ends extending into and supported by a corresponding one of said plurality of louver support receptacles formed in said one of said second pair of perimeter rails, the other of its distal ends extending into and supported by a corresponding one of said plurality of louver support receptacles formed in the other of said second pair of perimeter rails, and extending through a corresponding one of said plurality of louver support through holes formed in said center louver support rail;

wherein each of said plurality of louvers is supported by the center louver support rail but is not coupled to the center louver support rail for increasing the strength of said plurality of louvers with respect to airborne objects;

four frame corner connection members having a first projection secured within a receptacle of one of the said pairs of perimeter rails, and having a second projection secured within a receptacle of another of the said pairs of perimeter rails, wherein the four frame corner connection members have a plurality of lands separated by a plurality of grooves complementary to a plurality of lands and a plurality of grooves within the first pair of perimeter rails and the second pair of perimeter rails;

wherein at least one of the said four frame corner connection members has a latch-pin passage extending through a first projection in its extending direction, a corresponding one of said pairs of perimeter rails further comprises an elongated clearance passage from an exterior of said corresponding one of said pairs of perimeter rails extending in an extending direction of the corresponding one of said pairs of perimeter rails, and another one of said pairs of perimeter rails includes a latch pin clearance hole, and further comprising a latch pin extending through and supported by said latch-pin passage;

a latch pin receiving structure, having a latch pin receptacle, mounted to an exterior wall surface;

a manually rotatable screw having a threaded shaft extending through said elongated clearance passage and threadably engaged with said latch pin, with a manual contact structure exterior to said another of said longitudinal rails;

wherein tightening said manually rotatable screw substantially prevents motion of said latch pin in the extending direction of said latch pin passage, and wherein loosening said manually rotatable screw allows movement of said latch pin from an extended position in which it extends though said latch pin passage, through said latch pin clearance hole and into said latch pin receptacle, to a retracted position wherein the latch pin does not extend into said latch pin receptacle; and

wherein said four frame corner connection members flex for reducing bending and twisting forces applied to said unitary frame.

27. (New) The shutter of claim 26, wherein said four frame corner connection members comprise a plurality of longitudinal grooves separated by a plurality of lands on at least one surface of at least one of said four frame corner connection members, wherein the plurality of lands corresponds to a plurality of grooves within said perimeter rails.

28. (New) The shutter of claim 26, wherein the latch pin is adapted to pass through a latch pin receiver mounted exterior to said shutter, wherein the latch pin receiver mount comprises a camel bracket with two side plates and a through hole in one of the two side plates for receiving an end of the latch pin.

29. (New) The shutter of claim 1, wherein the latch pin is adapted to pass through a latch pin receiver mounted exterior to said shutter, wherein the latch pin receiver mount comprises a camel bracket with two side plates and a through hole in one of the two side plates for receiving an end of the latch pin.

30. (New) The shutter of claim 1, wherein said four corner connection members comprise a plurality of longitudinal grooves separated by a plurality of lands on at least one surface of at least one of said four corner connection members, wherein the plurality of lands corresponds to a plurality of grooves within said longitudinal rail members.

31. (New) The shutter of claim 15, wherein at least one of said frame corner connection members comprise a plurality of longitudinal grooves separated by a plurality of lands on at least one surface of at least one of said frame corner connection member, wherein the plurality of lands corresponds to a plurality of grooves within said frame members.

32. (New) The shutter of claim 22, further comprising:

four frame corner connection members having a first projection secured within a receptacle of one of the said pairs of perimeter rails, and having a second projection secured within a receptacle of another of the said pairs of perimeter rails, wherein the four frame corner connection members have a plurality of lands separated by a plurality of grooves complementary to a plurality of lands and a plurality of grooves within the first pair of perimeter rails and the second pair of perimeter rails;

wherein at least one of the said four frame corner connection members has a latch-pin passage extending through a first projection in its extending direction, a corresponding one of said pairs of perimeter rails further comprises an elongated clearance passage from an exterior of said corresponding one of said pairs of perimeter rails extending in an extending direction of the corresponding one of said pairs of perimeter rails, and another one of said pairs of perimeter rails includes a latch pin clearance hole, and further comprising a latch pin extending through and supported by said latch-pin passage.

33. (New) The shutter of claim 32, wherein said corner connectors flex for reducing bending and twisting forces applied to said unitary frame.

34. (New) The shutter of claim 32, wherein the latch pin is adapted to pass through a latch pin receiver mounted exterior to said shutter, wherein the latch pin receiver mount comprises a camel bracket with two side plates and a through hole in one of the two side plates for receiving an end of the latch pin.

35. (New) The shutter of claim 32, wherein at least one of said corner connection members comprise a plurality of longitudinal grooves separated by a plurality of lands on at least one surface of at least one of said corner connection member, wherein the plurality of lands corresponds to a plurality of grooves within said perimeter rails.

36. (New) The shutter of claim 23, wherein the latch pin is adapted to pass through a latch pin receiver mounted exterior to said shutter, wherein the latch pin receiver mount comprises a camel bracket with two side plates and a through hole in one of the two side plates for receiving an end of the latch pin.